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ABSTRACT

The data reported here represent the major findings of a number of Institute for Research on Learning Disabilities (IRLD) research studies. The relevant research reports are listed in Appendix A. A summary of the findings is provided in Appendix B. These findings are summarized in two general areas: (a) information on contemporary assessment practices gathered from individual assessors, decision makers, or students; and (b) information gathered on the team decision-making process. The implications of the findings for school psychology are discussed, and reactions to the findings and implications are provided by a practicing school psychologist (Betty Yanowitz) and by an administrator at the state department level (John Taylor). (Author/GK)

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CURRENT RESEARCH ON PSYCHOEDUCATIONAL ASSESSMENT AND
DECISION MAKING: IMPLICATIONS FOR TRAINING AND PRACTICE

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Preface

This paper is based on a presentation by the authors at the 1981 annual convention of the National Association of School Psychologists in Houston, Texas. The data reported represent the major findings of a number of IRLD research studies; the relevant research reports are listed in Appendix A. A summary of the findings, which was distributed at the presentation, is provided in Appendix B.

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Current Research on Psychoeducational Assessment and Decision Making: Implications for Training and Practice

The University of Minnesota Institute for Research on Learning Disabilities (IRLD) is one of five institutes under federal contract to conduct research in the area of learning disabilities. The primary focus of the Minnesota Institute is on improving the assessment and decision-making process. One goal of IRLD research has been to address the need for documentation of current practices. Toward this end, a number of studies examining the state of the art in educational assessment and decision making have been conducted. The studies utilize various methodologies, including:

- Simulation of the decision-making process
- Psychometric assessment of students
- Surveys
- Videotapes of placement teams
- Longitudinal case studies
- Reviews of student records

Throughout the studies on assessment and decision-making practices in schools, we have been aware of the complexity of the process and the many factors that influence educational decisions. Furthermore, we realize that there are no easy answers to the complex problems that affect these practices, and we propose no simple solutions. Our research efforts are an attempt to describe the process as it now exists, with the goal of providing information on the characteristics and effectiveness of current practices that can lead to implications for

improving services to students.

This paper summarizes findings in two general areas: (a) information on contemporary assessment practices gathered from individual assessors, decision makers, or students; and (b) information gathered on the team decision-making process. Following these two sections, the implications of the findings for school psychology are discussed. Reactions to the findings and implications then are provided by a practicing school psychologist (Betty Yanowitz) and by an administrator at the state department level (John Taylor).

Contemporary Assessment Practices

Individual pupil assessment has long been a major part of the school psychologist's activities and an important aspect of the educational decision-making process. In regard to learning disabilities specifically, we were interested in finding out what assessment devices are being used; whether the devices used are technically adequate, and how well they, in fact, identify learning disabled students. We also were interested in identifying key factors that influence decisions about students.

Six methodologies -- simulation, assessment, surveys, videotapes, case studies, record reviews -- were used to explore these questions. Since results generally were consistent across studies employing the various methodologies, two major studies will be used to illustrate key findings. Occasional mention will be made of other studies when appropriate. The two major studies discussed here are: (a) a simulation of the decision-making process, and (b) psychometric assessment of LD, and non-LD low-achieving students by IRLD staff. The methodologies for these two studies are described briefly to provide a context for discussion of the findings.

The subjects for the computer-aided simulation study included 223 educational personnel from the Minneapolis/St. Paul metropolitan area. Subjects were school psychologists, special education teachers, regular education teachers, administrators, and support personnel who had participated in at least two placement team meetings in their home schools. A diagram of the simulation process is presented in Figure 1. Each

subject was administered a 25-item pretest assessing knowledge of basic measurement and assessment procedures. After this was completed, the subject received a referral sheet for a hypothetical fifth grade student; the referral sheet included such information as the child's name, age, parents' occupation (reflecting socioeconomic status -- SES), a picture of the child, and a statement of the referral problem. The referral statement (see Table 1) was general in nature and reflected either academic or behavioral concerns. The sex, SES, attractiveness of the student, and type of referral problem were systematically varied to produce 16 conditions; each subject was assigned to one of these conditions.

Insert Figure 1 and Table 1 about here

After reviewing the referral information, subjects were given access to technical, quantitative, and qualitative information on 49 commonly used assessment devices/procedures via a Telray remote computer terminal. Subjects could look at information on as many devices as they wished within a 25-minute time frame. All quantitative and qualitative assessment data provided were within the average range for a fifth grade student.

When the subject indicated she/he had finished reviewing assessment information, a series of decision questions was asked relating to eligibility for services, classification, prognosis, and placement. Subjects also were asked to indicate the degree to which the different types of information available had influenced their decisions.

In the second major study, 50 LD and 49 low-achieving fourth grade students were administered a battery of psychometric measures by IRLD staff members. The LD students were those students identified by their schools as LD within six months prior to participation in the study. The low-achieving group consisted of those students who had not been identified as learning disabled by their schools but who had scored at or below the 25th percentile in reading or math on the Iowa Test of Basic Skills and who showed average or above average ability on school-administered group tests of general cognitive ability. The devices administered to these students are listed in Table 2. This battery was constructed to include a representative sample of those devices commonly used to identify LD students.

 Insert Table 2 about here.

Research findings from the two studies described above, as well as from other studies, were used to answer four key questions:

- What assessment devices are being used in making identification, placement, and programming decisions?
- How technically adequate are the assessment devices that are commonly used?
- How well do commonly used devices identify learning disabled students?
- What factors affect the decisions being made?

WHAT ASSESSMENT DEVICES ARE USED IN MAKING IDENTIFICATION, PLACEMENT, AND PROGRAMMING DECISIONS?

In a study in which we reviewed the school records of past and

present students at a private day school for LD students, we found a large number of assessment devices being used. The school itself had 160 assessment devices on file. Of these, 42 were mentioned in the records of one or more of the students, with 15 of these devices mentioned fairly frequently. For any one student, information from 9 to 18 devices was recorded in the student's file.

We also surveyed 39 Child Service Demonstration Centers (CSDCs) about the devices they commonly use to assess their students. The number of devices mentioned by these model programs for LD students varied greatly, ranging from 3 to 39 ($\bar{X} = 11.5$, $SD = 8.3$). Thirty-one different commercial devices and a variety of informal/center-developed instruments were used by three or more centers. No one device was used by all centers and only five devices were used by more than half of the responding centers. These five devices were:

- Key Math Diagnostic Arithmetic Test
- Peabody Individual Achievement Test
- Wechsler Intelligence Scale for Children (original or Revised)
- Wide Range Achievement Test
- Informal or Center-developed tests.

In the simulation study, subjects could choose to look at information on as many of the 49 devices listed as they wished within a 25-minute time frame. Of the 159 subjects whose choices were recorded, a total of 1014 devices were selected ($\bar{X} = 6.4$ devices per subject). In contrast to the emphasis on achievement-oriented devices by the CSDCs, none of the five most commonly selected devices in the simulation study were achievement measures. In fact, the most commonly selected

achievement measure, the Peabody Individual Achievement Test, was only the eighth most frequently selected device. The top five devices in the simulation study were:

- Wechsler Intelligence Scale for Children - Revised
- Bender Visual Motor Gestalt Test
- Peterson-Quay Behavioral Checklist
- frequency counts
- Stanford-Binet Intelligence Scale

HOW TECHNICALLY ADEQUATE ARE THE COMMONLY USED ASSESSMENT DEVICES?

Technical adequacy of assessment devices selected by subjects in IRLD studies was judged on the basis of the criteria for norms, validity, and reliability set forth in APA Standards (1974). The various assessment devices were considered technically adequate or technically inadequate with regard to each of the three characteristics in relation to usage with normal populations; technical adequacy with regard to the use of assessment devices for an LD population rarely has been investigated. This should be kept in mind when considering the following data.

The percentages of technically adequate devices selected in the first through fourth selection during the simulation study are listed in Table 3. Approximately three-quarters (77%) of the first devices selected were technically adequate with regard to norms. Somewhat more than half were technically adequate with regard to reliability and validity (58% and 55%, respectively). By the fourth selection, very few of the devices were technically adequate in terms of norms, reliability, or validity. The higher rate of technically adequate devices selected early in the assessment process may be explained partly by the use of a few

very commonly used devices that do evidence technical adequacy, such as the WISC-R. The pattern of decreasing technical adequacy as the selection process continues also was evidenced in a survey of decision makers in an eastern state and in information collected from the Child Service Demonstration Centers.

Insert Table 3 about here

HOW WELL DO COMMONLY USED ASSESSMENT DEVICES IDENTIFY LEARNING DISABLED STUDENTS?

In our review of records at a private school for LD students, it was noted that the assessment information reflected overall underachievement, with very few students scoring above the standardization mean in any area. Also, of the 64 students for whom there were data available from both a standardized individual ability test and a standardized individual achievement test, over two-thirds had an ability-achievement discrepancy of less than one standard deviation.

In the LD/low achievers' study, no differences of practical utility were found between the two groups when the scores on the psychometrics administered by the IRLD staff were examined. While the LD students, as a group, had scores significantly lower than the low-achieving group, on some measures, from 82 to 100 percent of the students in the two groups earned scores within a common range on the 49 different subtest and total test scores. Therefore, it was not possible to tell whether a student was LD or low achieving on the basis of the test scores. For an example of standard score distributions for LD and low-achieving students, see Figure 2.

Insert Figure 2 about here

To test the possibility that patterns of test scores provide decision makers with the information needed to determine whether a child is classified as LD, sets of scores from eight non-LD and nine LD students from the LD/low achievers study were given to three groups of judges. One group consisted of 38 special education teachers, the second group was 65 school psychologists, and the third group was made up of 21 non-educators (university business and engineering students). The judges classified each of the 17 students as learning disabled or not learning disabled on the basis of test scores. These classification decisions then were compared to how each student had been classified by his/her school and how he/she would be classified using a 1.0 or 1.5 standard deviation ability-achievement discrepancy definition. Of the decisions made by the 124 judges for the 17 students, approximately half matched the identification of the student as LD or non-LD as determined by the school's definition or the ability-achievement discrepancy definitions (see Table 4). The non-educators were just as accurate as the educators in determining which students were school-classified LD, or LD by the 1.0 standard deviation ability-achievement discrepancy definition. Further, the non-educators were considerably more accurate than the educators when a more severe (1.5 standard deviation) ability-achievement discrepancy definition was applied to the student's scores. In all other cases, the overall "hit rate" for any group of judges was approximately what would be expected if the students were randomly classified.

Insert Table 4 about here

In the simulation study, 51% of the subjects indicated that the

student was likely or very likely to be eligible for special education services. This occurred despite the fact that all of the assessment data they reviewed reflected performance in the average range. The percentages of subjects within each professional role who indicated that the student was likely to be eligible for services are listed in Table 5. Regular teachers were most likely to declare the student eligible for special education services, while special educators were the least likely to say the student was eligible for services. Yet, even 32.1% of the special educators were willing to declare the student eligible, despite the student's average performance during assessment.

 Insert Table 5 about here

The percentages of simulation study subjects within each role who indicated that the student was likely or very likely to be mentally retarded, learning disabled, and/or emotionally disturbed are listed in Table 6. Overall, 62% of the subjects indicated that the student was likely to fall into one or more of the categories; the most frequently used was learning disabilities. In fact, half of the special education teachers and school psychologists indicated that the student was likely to be learning disabled.

 Insert Table 6 about here

Only 16 of the 223 decision makers in the simulation study clearly did not classify the student and also said the student was not likely to be eligible for special education services. Recall that all of the

11
assessment data were within the average range; yet, only seven percent of the subjects indicated that the student was not handicapped.

WHAT FACTORS AFFECT THE DECISIONS BEING MADE?

Throughout the various studies conducted, decision makers indicated reliance on intelligence and achievement data, the discrepancy between these two types of information, teacher input, and the statement of the referral problem as the bases for decisions. The reliance on a subjective and vague referral statement was particularly evident in the simulation study. Not only did the subjects say that the referral statement influenced their decisions, but statistical analyses confirmed this. For example, even though the assessment data available were identical for all students, those who had referral statements focusing on behavioral concerns were more likely to be considered emotionally disturbed than those students whose referrals were more academically oriented. Conversely, students with referral statements focusing on academic concerns were generally perceived to be learning disabled.

In summary, there appear to be major problems with the assessment process as it currently exists. We found that decision makers rely on many technically inadequate tests to make important educational decisions. We also have found that regardless of the technical adequacy of the assessment devices used for identification, it is extremely difficult to differentiate learning disabled students from their low-achieving counterparts or even from average students. Of all the information available to decision makers, the original referral statement seems particularly influential in the decisions made. It is not yet clear whether this is due to the actual content of the referral statement, or

due simply to the fact that a referral was made and the search for a psychometric basis for the referral ~~set in motion~~.

It is important to note that the results reviewed above were based on information gathered from individual decision makers. While the input of individuals is an influential part of the decision-making process, actual eligibility and placement decisions now are made by multidisciplinary teams of school personnel. Therefore, any investigation of the psychoeducational decision-making process must consider the functioning of the multidisciplinary team.

Contemporary Team Decision-Making Practices

Another major line of research has been the investigation of team decision-making practices. Although multidisciplinary teams are mandated by PL 94-142, there is little empirical research evidence on current practices and on the effectiveness of decision-making teams. One goal of IRLD's research on team decision making has been to address this need for documentation of current practices.

There have been several IRLD investigations on team decision making; these have employed the following methodologies:

- naturalistic observation
- videotaping
- longitudinal case studies
- surveys

One major study involved naturalistic observation and/or videotaping of 38 pupil placement teams in Minnesota. Observation and study of videotapes of these teams were used to address several questions on current team decision-making practices. A second major investigation used a longitudinal procedure to follow seven student cases from the initial point of referral to the final outcome (e.g., placement in special education). In order to gather information for the case studies, research investigators studied relevant documents, interviewed parents and professionals involved with the case, and attended child study meetings. Surveys also have been employed to gather data on team decision making. Members of the 38 teams videotaped and/or observed in the naturalistic investigation answered survey questions following the meetings in which they participated. Members of 23 decision-making teams in Nebraska

also completed the same survey, but were not observed. Additionally, surveys of current team practices were completed by 100 directors of special education in 49 states and by 39 directors of Child Service Demonstration Centers.

The following discussion combines and summarizes findings across the various investigations in order to address six major research questions:

- What are the characteristics of a "typical" decision-making team?
- To what extent do all team members participate in all aspects of the decision-making process?
- What are the team members' perceptions of the decision-making process?
- To what extent are parents active participants in the process? What are parents' views of the process?
- What is the content of team meetings, and is there a relationship between the data presented and the decision reached?
- To what extent do the teams meet criteria of effective team functioning?

WHAT ARE THE CHARACTERISTICS OF A "TYPICAL" DECISION-MAKING TEAM?

Of the meetings studied, the average team meeting consisted of seven to nine professionals, lasted from 30 to 45 minutes, and considered three options before placing a student. However, there was considerable variability and inconsistency across decision-making teams. The teams studied ranged in size from 1 to 16 members, in length from 5 minutes to 2 hours, and considered 1 to 5 placement options. Regarding team membership, four professionals were present most often at meetings;

they were: a school administrator (usually a principal), a school psychologist, a special education teacher, and a regular education teacher.

TO WHAT EXTENT DO ALL TEAM MEMBERS PARTICIPATE IN ALL ASPECTS OF THE DECISION-MAKING PROCESS?

For this question, we investigated both the degree of participation of the various professionals in the decision-making process and the type of participation in the decision-making tasks of presenting data, offering service options, and generating goal and method statements. The most salient finding was that regular class teachers, who were among the top four professionals most often present at team meetings, were not active participants in decision-making functions. The majority of regular class teachers' participation in meetings consisted of presenting classroom and related data; less than 10% of regular class teachers' participation in meetings was spent in decision-making functions such as making recommendations and proposing options. Regular class teachers were among the least active participants in proposing service options for students. On the other hand, special education teachers, principals, and school psychologists were the most active participants in proposing options. Regular education teachers also were among the least active in initiating goal and method statements, even though they most likely have the greatest amount of educational information about the child and would be responsible for intervening with the child. Relative participation by team members in the decision-making tasks of proposing options and initiating goal and method statements are listed in Table 7.

Insert Table 7 about here

WHAT ARE TEAM MEMBERS' PERCEPTIONS OF THE DECISION-MAKING PROCESS?

Team members generally reported they were satisfied with the outcome of the meeting and furthermore felt they were an important part of the process. Although a major purpose of multidisciplinary team meetings is to foster a sharing of information between participants, the majority of team members reported that their view of the child had not changed as a result of the meeting. In reporting factors that influenced their decision, team members stated they were influenced by data presented, not by factors such as child characteristics, internal constraints (e.g., availability of services) or external pressures (e.g., advocacy groups). The factors reported as most influencing decisions were teacher reports of classroom achievement, information from the parent, and other sources of data (including observations, test scores, etc.). (See Table 8.) It is interesting to note that information from teachers and parents is reported as being the most influential, yet teachers and parents are among the least active in participating in actual decision-making functions.

Insert Table 8 about here

To look at constraining variables in effectively implementing team decision making, a national survey asked special education directors to report the factors that operate as constraints in their districts. The factors most often reported were time and scheduling constraints, lack of adequate funds and staff, excessive paperwork, impediments to parent involvement, and the need for training in team

decision making.

TO WHAT EXTENT ARE PARENTS ACTIVE PARTICIPANTS IN THE DECISION-MAKING PROCESS? WHAT ARE PARENTS' VIEWS OF THE PROCESS?

Team members reported that information from parents is a major influence on their decisions, yet, in general, parents do not seem to be active and informed members of the team decision-making process. Our findings regarding parent participation revealed that parents were never asked either their understanding of the meeting's purpose or their expectations for the meeting. Parents rarely were asked for their input in the meeting (and only then for verification of an observed problem), and in only 27% of the meetings was the language at a level judged to be understandable to parents. Furthermore, parents were among the least active participants in proposing options and in suggesting goals and methods, as can be seen in Table 7.

Another finding relative to parents' views of the decision-making process was that, paradoxically, despite their lack of active involvement in decision-making for their children, parents generally had a positive view of the process. A typical response from parents was that they felt the school was concerned and doing its best to help the child. However, questioning of parents also revealed that parents did not appear to understand the decision-making process, the purpose of the meetings, and the results presented at the meetings. Furthermore, parents often may be disenfranchised of full participation in decision-making activities as evidenced by the finding that 79% of directors in the national survey reported that they hold meetings without parents present to come to a school consensus on a decision to be presented to parents.

WHAT IS THE CONTENT OF TEAM MEETINGS, AND IS THERE A RELATIONSHIP
BETWEEN THE DATA PRESENTED AND THE DECISION REACHED?

The goal of this question was to describe the actual content and process of the meetings (i.e., to describe how time is spent in meetings, to describe what data are presented, and to document the actual outcome of the meetings). Overwhelmingly, most of the time in team meetings is spent in describing the child's problem and in presenting data rather than generating and discussing alternatives for the child. Approximately 30% of the meeting time observed was spent presenting test data; 17% of the time was spent in discussing classroom performance. Anecdotal reports, procedural matters, and tangential statements comprised the majority of the remaining meeting time. A small proportion of this remaining meeting time was spent in receiving parental input and generating and discussing alternatives for programming. The rankings of various types of data discussed in meetings are listed in Table 9.

Insert Table 9 about here

Furthermore, most of the data discussed in meetings, either non-test based or test based, were judged by researchers to be irrelevant to the final decision reached. We found essentially no relationship between the data presented and the determination of eligibility for LD services according to three major criteria. The correlations between the data presented that supported each criterion and the decisions reached were calculated for the significant ability-achievement discrepancy criterion, the verbal-performance IQ discrepancy criterion, and the Federal definition criterion. In all instances, these correlations were low and non-significant. (See Table 10.) However, the correlation between the amount of

data presented and the decision reached was .52; in other words, the more data presented in a meeting, the more likely the child was to be labeled LD.

 Insert Table 10 about here

TO WHAT EXTENT DO THE TEAMS MEET CRITERIA OF EFFECTIVE TEAM FUNCTIONING?

Criteria for effective team functioning were formulated from a review of the literature and were used to rate the team meetings. These criteria are listed in Appendix C and can be summarized in the major categories of effective team functioning as follows:

- The purpose of the meeting is clearly stated.
- The roles of team members are defined clearly and participation by all team members is encouraged.
- The data presented are relevant to the decision to be made.
- There is non-specialized participation by all team members (i.e., all members participate actively in all aspects of the decision-making process).
- There is structured separation of decision-making activities (i.e., there is clear delineation between such activities as presenting information, proposing alternatives, and evaluating options).

It was found that the teams studied did not meet these basic criteria of effective team decision-making practices. The overall findings were:

- The purpose of the meeting seldom was stated explicitly.
- The roles of team members never were defined clearly and participation by all team members never was encouraged.

- The data presented generally were not relevant to the final decision reached.
- Team members did not participate equally in all aspects of decision making; some team members clearly were more active in some functions than other team members. For instance, regular class teachers rarely proposed options.
- There was no clear delineation of activities; furthermore, in 88% of the meetings we could not ascertain the final decision made or who made it.

In summary, the major findings of IRLD research regarding team decision-making practices were: not all team members (particularly regular classroom teachers and parents) actively participated in all aspects of decision making; most of the time in meetings was spent in describing and discussing data that often were derived from technically inadequate devices and often did not relate to the final decision reached; and finally, teams did not meet the established criteria for effective team functioning.

From the research on current assessment and decision-making practices, we have seen that there are major problems. Action needs to be taken to improve the effectiveness of assessment and team decision-making practices and to consider alternatives to current practices. Our findings have numerous implications for improved practices. These implications for school psychologists will be discussed in the next section.

Research Implications

Assessment and decision making reflect a complex interaction of the people making the decision, the data, and the characteristics of the child within his/her social context. There are no easy, simple solutions to problems in this complex process. There is no single way to assess; there is no single guideline for decision making. There is no recipe for effective assessment and team decision making; at most, we have identified some necessary ingredients. We would like to indicate at the outset that these ingredients require ongoing evaluation and should vary from district to district due to unique characteristics of each school system. What makes sense for Grand Rapids, Michigan may not make sense for Houston, Texas.

Implications for assessment and decision-making practices may be addressed most meaningfully by reflecting on the daily routine of school psychologists. The following scenario provides the context for understanding the implications suggested by the synthesis of IRLD's research findings.

The school psychologist receives a referral. Upon arriving at the referred student's school, the psychologist performs two tasks: 1) he/she administers a standard battery of tests including the Bender, WRAT, and WISC-R, and 2) he/she speaks briefly with the referring teacher. Other team members collect their data. The team meets, possibly several times, to discuss and share information regarding the referred student. Eligibility and placement decisions may be suggested or even discussed. Next, the referral and assessment information is presented to the parents, whose input is often limited to verification of an observed problem. An IEP signature is obtained and the student is placed. Follow-up consultation may or may not occur. The school psychologist receives another referral.

Relate this scenario to the salient assessment and decision-making findings, which include:

- The reason for referral was very influential in the decision-making process.
- There was heavy emphasis on testing in the assessment/ decision-making process.
- The tests used were often technically inadequate.
- When educators looked at psychometric data, their identification of learning disabled students was no better than chance.
- Psychometric differentiation between low-achieving and learning disabled students was not found.
- The more tests given, the more likely the child was to be called LD.
- Most of the time in team meetings was spent in presenting data rather than generating alternatives for programming.
- Parents and regular classroom teachers participated the least in team decision making.
- Data presented in team meetings generally did not relate to the final decision made.

The impact of the referral statement was identified as extremely powerful throughout IRLD's research. We believe that the referral statement sets in motion the search for pathology -- the search for a problem within the child -- a search for confirming evidence, most likely with technically inadequate devices. Three questions come to mind: (1) when do teams know they have enough information to make an eligibility decision? (2) is the information solely test-oriented? (3) are team decision makers using relevant data, or, as suggested by Reynolds (1975), are some students receiving "more process than is due?"

The important issue for the practice of school psychology is how we, as school psychologists, can meet the challenge of improving assessment and decision-making practices. The implications of the research findings include: the need for examination of underlying assumptions of current assessment practices, the importance of contact between the school psychologist and the referring teacher, the need for training in team decision making to increase and equalize participation by team members, and the need for on-going evaluation and documentation of team decision-making practices.

Assumptions of Current Assessment Practices

Recall the first half of the scenario in which the school psychologist receives a referral, administers a standard battery of tests, and speaks with the classroom teacher. The research findings suggest that it is time for school psychologists to examine the underlying assumptions of current assessment practice. Do we really believe it is good assessment practice to administer routinely the same tests to all students referred? Do we really believe primarily test-oriented assessment reflects good practice? Do we really believe arbitrarily defined criteria, such as ability-achievement discrepancies, validly define learning disabilities? Rather than asking, "What tests do I give?" perhaps we should be asking: (1) What decisions are we trying to make for the referred student? and (2) What behaviors of the student must be sampled to make those decisions?

Decisions vary. Teams are asked to make eligibility, placement, instructional planning, and program evaluation decisions. By identifying the behaviors to be sampled to make different decisions, we will need to broaden our view of assessment from primarily a psychometric

orientation, an orientation that searches for presumed characteristics within the child, to an orientation that emphasizes the environment in which the student is expected to function. Standardized tests are merely one way to sample behaviors. Other techniques include daily measurement of educational objectives, charting of interventions tried, examination of classroom expectations, teacher-made tests, teacher observations, and structured observational systems measuring classroom characteristics such as instructional task, student response, and teacher behavior. Assessment procedures should differ for a decision to place a student in a remedial math program versus the decision as to whether a student has progressed in an intensive learning disability program. The challenge lies in our collecting the appropriate data for the decision to be made. It is challenging because it may involve creativity and experimentation in sampling behaviors of the referred student. It may be that to make certain decisions, primarily classroom teachers or parents should be involved in sampling the behaviors.

Second, regarding assessment practices, we have a role to play in the overuse and misuse of tests. Have we fallen into the habit of administering a standard battery or do we ask, "Am I using the test for the purpose for which it was designed?" Using a device technically adequate for screening purposes to assess a student's yearly progress is inappropriate. The technical adequacy of devices must be checked when using them for eligibility and placement decisions.

By initially addressing the decisions to be made, we as school psychologists need to adopt the assumption that assessment is a process of problem solving, thereby differentiating it from testing, which is

one set of methods for problem solving. Testing is a viable data collection method for certain decisions; however, utilization of alternative methods for problem solving may move us from diagnostic procedures that primarily serve to classify or label a problem within the student to diagnostic procedures that develop a set of working hypotheses about how best to intervene with the student. As school psychologists we have a responsibility to assure that children are not labeled solely on the basis of psychometric results.

Given that psychometric information has not proven successful in differentiating low achievers and the learning disabled, that the ability-achievement discrepancy is not a useful notion for instructional planning, and that the goal of the law is placement in the least restrictive environment, we must broaden our view of assessment and train team members in model assessment practices, including technical adequacy of devices, appropriate data collection methods, and emphasis on intervention as opposed to placement.

School Psychologist-Referring Teacher Contact

The school psychologist in the scenario spoke with the classroom teacher regarding the referral. This contact has important implications for assessment and decision-making practices. The research findings indicate that the manner in which the referral is made often determines the nature of the assessment process and diagnosis. Referrals often are stated as conclusions and/or solutions to problems that have already been identified by the referring teacher. The research findings suggest that the referral statement sets in motion a search for pathology - a search for a presumed disability within the child. As a deterrent for

this search, the contact between the school psychologist and referring teacher must focus on the first step in an assessment problem-solving orientation, that of problem clarification.

Problem clarification includes identification of the problem behavior, comparison to peers for a measure of deviancy, and examination of instructional/behavioral interventions attempted. General referral statements reflecting a diagnostic entity (e.g., this child has a learning disability), specific methods of assessment (e.g., I want IQ results), or an intervention (e.g., I want him placed in a special class) should be replaced with statements of specific problem behaviors of the student (e.g., the student does not recognize letters; the student does not complete any written assignments in reading or language arts). If more than one problem behavior is identified, the teacher should rank order the severity of the behaviors. Next, it is important to ask, "How deviant is the problem behavior?" Data should be collected to compare the referred student with his/her peers. Finally, analysis of instructional and classroom interventions attempted is necessary. Consultation regarding a classroom intervention (either academic or behavioral) may conceivably, although not necessarily, halt the assessment process. Consequently, these steps will screen appropriate referrals to be considered for a more thorough assessment.

School psychologists must begin to acknowledge that just because a student is referred does not necessarily mean the student has problems warranting psychoeducational testing and/or a special education label. Rather, it may indicate a situation requiring teacher consultation for academic or behavior problems. As school psychologists, we must stop

perpetuating the automatic referral-to-placement process that is occurring for so many students. A more appropriate initial emphasis would be on the implementation of interventions in the classroom. This should serve to reduce time-consuming psychometric evaluations and improve instruction for children in the classroom.

Team Decision-Making Practices

Recall the second half of the described scenario involving team members and presentation of the findings to parents. Implications of IRLD's research findings suggest that ongoing inservice training at various stages in the team decision-making process is needed. Inservice training appears warranted to train teams initially in the use of criteria for effective team functioning, to examine the purpose of multidisciplinary teams, and to increase the participation of the regular classroom teacher and parents in the decision-making process through explanation of assessment findings and instructional interventions. Each inservice possibility will be addressed accordingly.

The research findings suggest that the organization and structure of teams is important for efficient decision making. When special education directors were asked to name constraints in implementing the team process, time and scheduling, lack of funds, and the need for training for decision making were cited. School psychologists have a role to play in training teams for effective decision making. This training, which should emphasize organized procedures, a clearly stated agenda, participation by all members, and use of data relevant to the decision, should enable teams to be more time efficient and cost effective.

Our findings raise two questions about the purpose of multidisciplinary teams. First, a major purpose of these teams is to foster

a sharing of information between participants; yet, the majority of team members reported that their perception of the student had not changed as a result of the meeting. If a purpose of the team meeting is to foster a multidisciplinary view of the student in which each team member adds a piece that contributed to the total picture, we would expect members' views to be altered in meetings. Since team members' views were not significantly altered, it does not appear that this goal of multidisciplinary teams was met. Second, the research findings suggested that an examination of team members' beliefs regarding assessment and the team role is necessary. Teams should ask, "Are we functioning as a team to diagnose and place or as a team to improve teaching, instruction, and learning?" Teams need to increase time spent in generating alternative service options and instructional interventions for the student. It is time to refocus team thinking away from who will serve the student to how can we, as educators, teach the student. Hopefully, such a refocusing will lessen the number of cases in which a student goes through the lengthy team decision-making process only to be declared ineligible and thus returned to the referring teacher who still does not know what to do for the student.

School psychologists have a role to play in staff training for the development of a mutual support system between regular and special education. Admittedly, inservice training addressing the two issues raised is difficult because questions rather than answers appear most evident. Perhaps the place to begin is to discuss such questions as:

- (1) Are team members merely presenting the data represented by their discipline (e.g., cognitive, achievement, observational), failing to

integrate it across disciplines? (2) Are team members knowledgeable regarding the data collection methods and interpretation of each discipline represented? (3) Are team members informed about current research and behavioral/academic interventions for students? The consultation skills of the school psychologist will be valuable in addressing and improving the goal of the multidisciplinary team functioning in each school.

Non-specialized participation is one of the criteria for effective decision making. However, our results indicated that while information provided by regular classroom teachers and parents was considered most valuable by all team members, parents and classroom teachers were among the least active participants in decision making. School psychologists have training in group process skills and need to utilize this training to increase meaningful participation by teachers and parents.

Regarding the participation of the classroom teachers, other research (Bass & Leavitt, 1963) has suggested that for a decision to be likely to be implemented, the person who will be implementing the decision should take an active part in the decision-making process. Since regular education teachers are often involved in the day-to-day implementation of team decisions, their lack of active participation in decision making is disturbing. School psychologists have a role to play in inservicing regular classroom teachers in the principles of individualizing instruction, alternative intervention strategies, and class management techniques. Without this essential knowledge base, it is erroneous to expect classroom teachers to be active participants in the team decision-making process, particularly in setting goals and identifying methods of instruction for students.

Similarly, our finding that jargon was used 87% of the time at the videotaped team meetings, suggests that school psychologists have a role to play in translating the jargon into concrete observable behaviors and in educating parents regarding assessment findings and educational alternatives. It may be that parents do not actively participate in meetings because they are receiving technical information for the first time. Our results also indicated that teams often discussed a student over a series of weeks before holding an eligibility conference. Recognizing that time is a precious resource, we suggest that the teams we observed could have made the team process more efficient, increased participation by parents and classroom teachers, and influenced instructional planning by reallocating team time to include two preparation conferences. At the school preconference all school members would meet once to share and integrate assessment findings. At the parent preconference, the school psychologist could serve as the team representative to convey the integrated assessment picture to the parents, to outline the purpose and agenda of the full team meeting, and to encourage questions. Additional reading materials on assessment and intervention techniques, preferably handouts written by team members, could be provided to the parents at this time. The preconferences should ensure understanding of the assessment information and crucial issues to be addressed, thereby enabling all participants to communicate and be actively involved in the decision, which should result in greater commitment in implementing instructional changes.

Evaluation and Documentation of the Team Process

Finally, the research findings offer a challenge to practicing school psychologists to conduct school-based research and evaluation of their districts' assessment and decision-making practices. Our results suggest some possible areas of investigation: longitudinal study of students involved in the decision-making process, evaluation of specified instructional interventions, and evaluation of inservice training and team decision making. On-going evaluation and documentation of the team process is necessary and, as school psychologists, we should be engineering this.

Final Comments

We recognize that numerous and varied implications for changes in the assessment and decision-making process have been addressed. In part, this is due to the comprehensiveness of the research findings. In part, it is due to our feeling that there are no simple solutions to the problems in the complex process; there is no one recipe that can be followed for assessment and decision making.

Furthermore, we want to emphasize that we are advocating change; however, we are not suggesting elimination of all current practices. Although we feel change must occur to broaden assessment techniques, we are not advocating elimination of testing. Although we feel assessment must begin with implementing instructional/behavioral interventions, we are not advocating abolition of comprehensive psychoeducational diagnostic studies. Although we feel inservice training or continuing education to broaden the knowledge base of all educators is necessary to improve instruction for all students, we are not advocating the demise

of Special Education.

The finding that the referral statement was influential in the assessment and decision-making process - a finding that suggests that if a student is referred there is a high probability the student will be placed - allows us to advocate for yet another change. We do not believe that all students referred (or even a high percentage) require placements. It is our feeling that referrals require interventions at many levels, from instructional changes within the regular classroom to intensive self-contained special education programming. We advocate for a change from referral-to-placement to referral-to-intervention.

The important issue for school psychologists is to meet the challenge of improving assessment and decision-making practices within each school district.

Reaction

by

Betty Yanowitz

School Psychologist
Granite School District, Salt Lake City, Utah

My first reaction upon hearing the results of the IRLD studies was, "Oh, no! That's me! I've been found out!" My sense of guilt, however, was quickly replaced by a feeling of relief as I thought of all the other "games" and "manipulations" I employ under the guise of decision making that have remained undiscovered and undisclosed in these otherwise comprehensive IRLD studies.

Then I thought to myself, "Why am I letting all the researchers make me feel guilty when everyone else I work with is praising me, in spite of, or maybe because of, my often irrational decision-making practices?"

The parents I work with, for example, respond almost cheerfully when I tell them of their child's newly discovered "Learning Disability." Many are relieved to hear that some "expert" is finally agreeing that their child has a legitimate, socially-accepted problem. At last, they are not being labeled as "bad parents" who have neglected to provide a stimulating learning environment for their child. In addition, I am offering parents a possible alternative to the frequently demanding and demeaning regular classroom teacher - a trained learning disability specialist who is certain to understand and help with the "problem."

The students I work with are also happy when informed of their disability. No longer are they being told they are lazy, crazy, or both. In fact, the same assignment that was criticized on Monday as being incomplete and inadequate, on Tuesday, is praised for its effort and

achievement in light of the student's newly labeled handicap. Competency tests are no longer an obstacle as students with identified problems are generally excused from passing these threatening exams.

The regular teachers in my school are also pleased with me for absolving them of their responsibility for these non-achieving students and for taking the identified problem child off their hands. My learning disability teachers are grateful to me for justifying their program and allowing them to teach remedial reading to rather pleasant, benign children. If one of these students dares to misbehave in the LD class, the teacher knows she merely has to yell "Behaviorally Handicapped," and the assessment and labeling process begins anew.

Members of the Association of Parents of Children with Learning Disabilities are pleased with me for identifying more potential members to march and demonstrate before the legislature in demand of more funds to serve the needs of their handicapped children. Our State Office of Education, once assured that all the required signatures are in their proper places, is happy that I am working in compliance with PL 94-142, thereby ensuring our state its alienable share of federal funds.

Thus, in spite of your discomforting research, my fellow practitioners and I praise ourselves for our clever ways of "beating the system" to get help for needy kids. We rationalize that what we are doing is totally justifiable because a perusal of the literature reveals that even the researchers can't agree on what a learning disability is or how to measure this elusive handicap. A review of state regulations reflects such a variety of interpretations and criteria for evaluating learning disabilities that one must wonder if we are all describing the

same condition. Maybe the reason that we psychologists rely so heavily on teacher referrals in decision making is that we can frequently see a rationale and consistency to teachers' criteria not found elsewhere in our regulations or in our test kits.

Yet, in spite of these rationalizations, I am extremely concerned that, as practitioners, we are making a serious error in buying into this irrational system under the guise of helping children. It is inevitable that our state legislators will become aware of studies such as those conducted by the IRLD in Minnesota. In this budget cutting era, I worry that this information will provide a justification for eliminating or underfunding any or all special education programs necessary for helping kids.

Furthermore, I believe that in perpetuating this system, we are cheating the children we believe to be "truly" learning disabled; in spite of my cynicism about our over-identification of LD children, I believe that such students actually do exist. (Of course, I must admit to frequently suppressing my impulse to take these children home and frame them when I do find them.) By using LD funding and services to help so many, we are not adequately serving the justifiable needs of the true learning disabled child. In addition, in playing these "games," we are neglecting our moral and ethical responsibility for recognizing and changing a system we know is wrong and inequitable.

In conclusion, I would recommend that we, as practitioners, take a proactive stance and join with parent organizations, school administrators, state offices of education, and legislators to work on improving and amending the odious labeling system under which we work. We should be concentrating on fixing the system rather than mending the child.

Psychologists must take an active leadership role before once again we are left behind, the perpetual victim, wondering what has happened to all our good intentions.

Reaction

by

John Taylor

Director of the Bureau of Psychological and Social Work Services
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Office of Special Educational Services

Fortunately, when I reviewed the findings of the IRLD's research, I found that I was not surprised. In fact, given the numerous court cases in which testing practices were at least one of the issues, the plethora of research articles critical of the standardization and validation of commonly used instrumentation, and the constant controversy surrounding various diagnostic categories, no one should be surprised. The IRLD findings are another clear indication that all is not well in school psychology. The school psychology, behavior therapy, and psychometric literature has for years pointed to the need for school psychology to abandon its over-reliance upon diagnostic testing as its primary service. However, actual field practice has not, for many reasons, been able to change that rapidly. These research findings hold certain implications for the field of school psychology at both the applied practice level and the administrative/state department levels. I would like to briefly note some of these implications in the hopes that more rapid change may occur.

Implications for the Field

School psychologists clearly must be more selective in their choice of instrumentation when conducting assessments of children. Unfortunately, this change in behavior will prove somewhat difficult for at least three reasons. First, State Department of Education criteria for special education placement frequently demand extensive testing. As was noted in the IRLD

research, school psychologists generally do quite well in their selection of the first few instruments used, but the quality of the instrumentation drops as the number of instruments used increases. As such, if a school psychologist uses several instruments in order to conduct a comprehensive evaluation of a suspected handicapped child, the school psychologist will, in all likelihood, choose at least some poorly standardized instruments. Second, test publishers continue to market assessment instruments of established poor quality. Finally, university trainers continue to instruct new school psychologists in the use of instruments which probably should not be used at all in any standardized fashion.

School psychologists clearly need to establish that their value to education goes far beyond their ability to administer and score psychometric and educational tests. A recent article by Altemose and Williamson (1981) suggests that in the near future the school psychologist may be replaced by a computer if the only activities that the school psychologist continues to engage in are those of administering and scoring tests. While Altemose and Williamson maintain that the school psychologist is safe for a little while longer because computers cannot as yet administer the tests or exercise clinical judgment in the scoring and interpretation of the tests, they failed to mention that group tests can be administered by teachers and scored by computers with results in many cases similar to those obtained by a school psychologist in an individual administration of the test.

I do not believe that it would be difficult to develop a computer program that uses teacher-administered group intelligence and achievement tests to generate a computer profile on the student's strengths and weaknesses and an automatic decision as to whether or not the child is eligible

for special education placement. While this is possible, I do not believe that it is advisable. I believe the school psychologist can provide more valuable information and services to the school, such as teacher consultation, individual and group therapy with children, and direct interventions in the classroom.

The results of the simulation study and the LD/Low Achiever study revealed that if these practices are common in the field, a large number of children identified as handicapped are in fact not handicapped. Some of these errors in classification may be attributed to faulty instrumentation, but the results of our own monitoring suggest that reliance upon vague referral statements and an attitude that any child with significant school problems needs special education are equally valid reasons for these errors. Our typical practice seems to be to assume that a referred child is handicapped ("guilty") and to assess to find the handicap instead of assuming that the child is not handicapped ("innocent") and assessing to discover the child's learning strengths and weaknesses and to make recommendations for instruction/treatment. It is this attitude, I believe, that leads professional assessment personnel to misclassify so many children as handicapped. The belief that any child with learning problems will benefit from special education whether or not they are handicapped is just that, a belief. Several research articles suggest that this belief may be erroneous, and that children may in fact receive more harm than benefit by being inappropriately classified as handicapped when they are not.

Finally, there is an aspect of the IRLD findings which were unmentioned in the report itself. That is, if assessment personnel frequently utilize

poorly standardized instruments, if faulty decision-making practices are engaged in by multidisciplinary teams, and if children frequently are misclassified, then one must wonder whether the recommendations for education and treatment made by the assessment personnel are at all valid. Teachers and parents alike frequently criticize the reports written by professional assessment personnel, maintaining that they are of little use in the instructional program, written in too much jargon, and often seeming to describe a child other than the one who was referred. It may be that this criticism is well deserved in light of our reliance upon the poor instruments and our frequent misclassifications.

Implications for Administration/State Department of Education

Faulty evaluations may lead to inappropriate placements of children in both special and regular education. As such, the findings of the IRLD studies have implications for the establishment of teacher/pupil ratios, class sizes, needed related services, and types of instructional programs utilized in special and regular education. This is so because state departments frequently follow trends in the identification of exceptional children and must make plans to have available sufficient numbers of teachers and support personnel to serve these children. If the classifications and recommendations of these children are in error, then it may well be that the entire instructional and planning system in a state is in error.

Similarly, training programs in education and psychology follow trends. If more children are being identified as emotionally disturbed or learning disabled, then it is likely that more teachers will be trained in the universities to serve these children, and that the emphases in

professional assessment courses will be on procedures for identifying learning disabled or emotionally disturbed children. I believe this has happened, and I am concerned that to some degree inappropriate identification practices have led to a "tail wagging the dog" phenomena in professional university training.

Finally, most state departments conduct regular monitoring activities. The IRLD findings clearly outline some of the activities engaged in by professional assessment personnel in local school systems that should be closely reviewed during these monitoring visits. For instance, in our own state, we found that in one year the evaluations of 50% of the children identified as handicapped did not meet state approved criteria for eligibility. While many of the "compliance" issues were of a petty nature, an equal number had to do with such factors as choice of instrumentation, relationship of the data gathered to the final decision, and disregard of the criteria--findings very similar to those of the IRLD studies.

As a final note, these findings force one to reconsider the results of research studies conducted using children identified as handicapped in public school settings. Numerous studies have been conducted in which researchers attempted to discover those salient factors that discriminated learning disabled children from regular children, for instance. If as many children are misidentified as handicapped in the public schools as these IRLD results suggest, then one must be very skeptical of the results of any research study that used already identified children as one population. In fact, even in the IRLD studies, questions must be raised as to whether the learning disability population was in fact really learning disabled.

These findings are far reaching, and of critical importance to the future of school psychology. While many of my colleagues may be critical of this research for psychometric reasons (e.g., the restricted samples, small numbers of subjects), I find that these results are very much in keeping with the findings of our own state monitoring teams. They are both real and significant, and demand a change in behavior on the part of school psychology, for if it does not change, it will very soon find itself to be in little demand.

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Footnote

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Table 1
Simulation Study Referral Statements

Type of Referral	Statements
Behavioral	<ol style="list-style-type: none">1. Belittles other children2. Talks back to adults3. Demonstrates temper tantrums4. Repeatedly fights with others5. Criticizes and nags others6. Annoys other children
Academic	<ol style="list-style-type: none">1. Fails to complete academic assignments in class2. Learns slowly3. Spells poorly4. Reads poorly5. Makes failing grades in arithmetic6. Fails to complete homework

Table 2

Psychometrics Administered in LD/Non-LD Comparison Study

Wechsler Intelligence Scale for Children - Revised
Peabody Individual Achievement Test
Stanford Achievement Test (selected subtests)
Bender Visual Motor Gestalt Test
Developmental Test of Visual-Motor Integration
Piers-Harris Self-Concept Scale
Peterson-Quay Behavior Problem Checklist
Woodcock-Johnson Psycho-Educational Battery: Tests of Cognitive
Ability and Tests of Achievement

Table 3
Percentages of Technically Adequate Devices
Selected in Simulation Study

	Norms	Reliability	Validity
Selection 1	77	58	55
Selection 2	46	57	39
Selection 3	33	40	26
Selection 4	17	23	15

Table 4

Judges' Accuracy in Identifying LD and Non-LD Students

	Special Education Teachers	School Psychologists	Non- Educators
School Definition	53%	55%	55%
1.0 SD Ability- Achievement Deficit	55%	55%	51%
1.5 SD Ability- Achievement Deficit	55%	56%	73%

Table 5

Numbers and Percentages of Decision Makers in Simulation Study
Declaring Student Eligible for Special Services

	N	%
Regular Teacher	58	61.2
School Psychologist	30	53.3
Administrator	28	46.4
Special Educator	84	32.1
Support Personnel	23	52.1

Table 6

Percentage of Decision Makers Classifying Normal Student
as Mentally Retarded (MR), Learning Disabled (LD),
and/or Emotionally Disturbed (ED)

	MR	LD	ED
School Psychologist	0	47	17
Administrator	14	25	14
Special Educator	1	50	18
Regular Educator	3	40	34

Table 7

Participation by Team Members in Two Aspects of
Team Decision-Making Meetings

Aspect	Most Active	Least Active
Initiating Service Options	Principal LD Teacher School Psychologist	Parent Regular Teacher
Initiating Goals and Methods Statements	School Psychologist LD Teacher	Principal Parent Regular Teacher

Table 8

Ratings of Factors Influencing Outcomes of Team Meetings^a

Factor	Rating	
	Mean	SD
Teacher reports of child's classroom achievement	4.40	0.79
Information from child's parent/guardians	3.70	1.16
Child's scores on achievement tests	3.68	1.49
Availability of services	3.64	1.25
Teacher reports of child's social behavior	3.56	1.18
Observational data other than teacher reports	3.49	1.26
Child's scores on intelligence tests	3.23	1.59

^aRatings were on a scale of 1 to 5, where 1 = no influence and 5 = very significant influence.

Table 9
Percentages of Meeting Time Spent
Discussing Domains of Assessment Information

Type of Data	Percent Time
Classroom	17
Achievement	14
Intelligence	7
Psycholinguistic	4
Perceptual-Motor	2
Personality	2
Other non-test information	53

Table 10

Correlations Between Eligibility Criteria
and LD Classification Decisions by Placement Teams

Criterion	Correlation
Ability-Achievement Discrepancy	.29
Verbal-Performance Discrepancy	.28
Federal Definition of Learning Disability	-.13

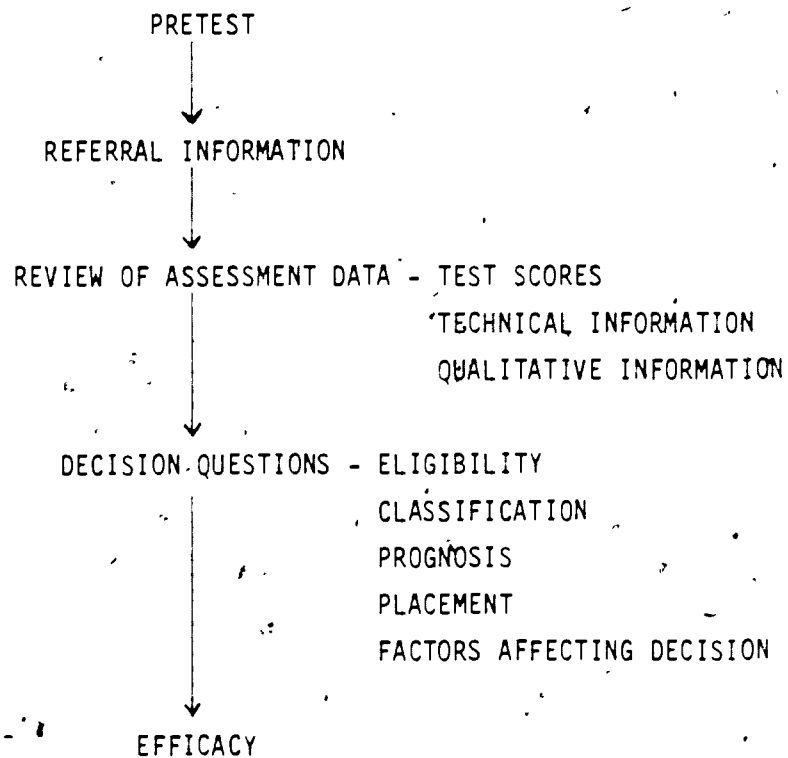


Figure 1. Diagram of Process in the Simulation Study.

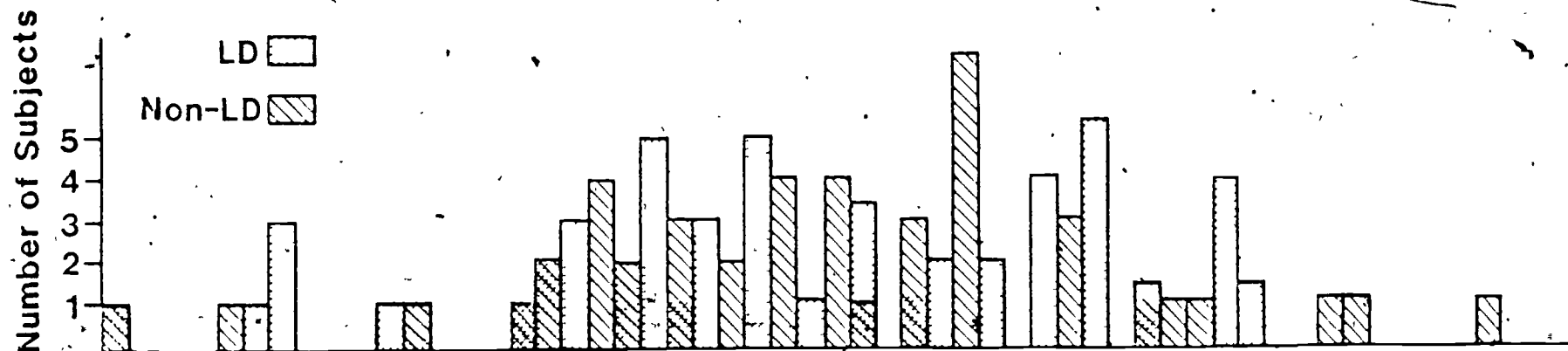


Figure 2. Distribution of Standard Scores on PIAT Math for LD and Non-LD Subjects.

APPENDICES

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Appendix B

Summary of Findings and Implications

Note: The results presented represent a synthesis of findings across studies utilizing varying sample sizes, methodologies, etc. Therefore, readers are encouraged to examine the original sources, which are listed in the bibliography.

Research Findings

1. A large number of assessment devices were selected and/or reported to be used by decision makers; there was considerable diversity among the devices used, and many of the devices used were technically inadequate for the purpose at hand.
2. Utilizing psychometric information, educators had difficulty differentiating low achievers from learning disabled students; students with an average psychometric profile were frequently classified as mentally retarded, learning disabled, and/or emotionally disturbed and said to be eligible for special education services.
3. The referral statement is often a major determinant of the final decision reached.
4. Most time in placement team meetings is spent in describing and discussing data about the student. These data are often derived from technically inadequate devices and often do not relate to the final decision made.
5. Not all team members, particularly teachers and parents, actively participate in all aspects of the decision-making process.

Implications for Training and Practice

1. Do not ask "what tests do we give?" Ask these questions:
 - a. What decision are we trying to make?
 - b. What behaviors must be sampled to make that decision?
 - c. Are the standardized measures to be used technically adequate for the purpose at hand?
 - d. Have we integrated results from multiple assessment methods and multiple information sources before making a decision? Are major findings consistent across data sources?
 - e. Have we employed a broad view of assessment including psychometric information, analysis of the learning environment, and interventions that have been employed?
2. Have pre-referral interventions, such as teacher-collected data or documentation of teaching strategies employed in the classroom, been tried, discussed and evaluated prior to the decision to begin the assessment process?
3. Does my team utilize criteria for effective team decision making? Does my team need training in the team decision-making process?
4. What school-based research would aid my team and/or district in making more efficient and effective educational decisions?

CHARACTERISTICS OF EFFECTIVE TEAM MEETINGS

Yes No

- ___ ___ 1. The purpose of the meeting is clearly stated (either verbally or in a written agenda).
- ___ ___ 2. Team members are informed that one of the purposes of the meeting is compliance with due process legislation.
- ___ ___ 3. Additional goals for the purpose of improving or evaluating team functioning or productivity are clearly stated. (An example of these additional goals is: "Remember that we agreed to use more behavioral or observational data in our decision making").
- ___ ___ 4. The roles of the team members are clearly defined (beyond name and title).
- ___ ___ 5. A statement is made about the desirability of participation by all team members.
- ___ ___ 6. The decision(s) to be made during the meeting is(are) clearly stated.
- ___ ___ 7. If more than 1 decision is to be made, they are identified as separate.
- ___ ___ 8. The reason for referral is clearly stated.
- ___ ___ 9. A member keeps some written record of the meeting. (Includes filling out forms at the end of the meeting.)

Data Presentation and Utilization

- ___ ___ 10. Data are explained in terms of how they relate to the problem (i.e., what they tell you, not just the score).
- ___ ___ 11. The student's strengths as well as weaknesses are discussed.
- ___ ___ 12. Comparisons occur across different sources of data (e.g., classroom observation and standardized tests) with evaluation of implications.
- ___ ___ 13. Everyday behavioral and academic data about the child are presented.
- ___ ___ 14. The provision and modifications which have been made in the regular classroom in attempt to deal with the student's problem(s) are explained.
- ___ ___ 15. Systematic behavioral observation data, as well as formal testing, are presented (i.e., a formal observation procedure was utilized).

Team Process

- ___ ___ 16. Team members are attentive listeners (i.e., look at speaker, nod, etc.).
- ___ ___ 17. Team members clarify others' remarks by questioning, paraphrasing, or elaborating.
- ___ ___ 18. Team members seek information and opinions from others.
- ___ ___ 19. The team stays on task.

Generating Alternatives

Yes No

- ___ 20. For each decision to be made the team produces a list of alternatives for the child's educational needs.
- ___ 21. The team suspends evaluation of the alternatives until the list is completed..

Evaluating Alternatives

- ___ 22. The team states the criteria for evaluating the alternatives.
- ___ 23. A team member verbalizes the need to evaluate the placement decision on the basis of the least restrictive alternative.
- ___ 24. Each alternative is evaluated in terms of the child's educational needs or the selected criteria.

Making the Final Decision

- ___ 25. Team members verbalize their opinions regarding the decision..
- ___ 26. Members attempt to reach through discussion a decision that all are willing to support (i.e., a consensus decision).
- ___ 27. A decision(s) is(are) made.
- ___ 28. The final decision is clearly stated.

Implementing the Decision

- ___ 29. A statement is made about the flexibility of the decision.
- ___ 30. A method for changing the decision is clearly stated.
- ___ 31. A method for evaluation of the decision is specified.
- ___ 32. A timetable for the program is specified.
- ___ 33. The role of each team member in implementing the decision is fully described.
- ___ 34. The team evaluates its meeting as having attained/not attained its goals for the meeting.

Meetings with Parents Present

- ___ 35. In the beginning of the meeting, the parents are asked about their expectations for the meeting, (e.g., the parents are asked what they hope to learn from the meeting).
- ___ 36. The parents are included through the use of direct questions to them, comments and explanations directed to them, and asking if they have questions.
- ___ 37. The parents' input is requested during the meeting.
- ___ 38. The parents' input is responded to by paraphrasing, comparing to other sources of information, etc.
- ___ 39. Language is at a level which the parents can understand. When technical terms are used, they are accurately defined in a way that parents can understand.

PUBLICATIONS

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University of Minnesota

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Requests should be directed to: Editor, IRLD, 350 Elliott Hall;
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